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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/509,939

10/01/2004

Risto Nikander

P08398US00/DEJ

4953

881 7590 10/30/2008

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EXAMINER

LAZORCIK, JASON L

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

10/30/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/509,939	Applicant(s) NIKANDER, RISTO	
	Examiner JASON L. LAZORCIK	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-11 is/are pending in the application.
- 4a) Of the above claim(s) 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. This application contains claim 10 drawn to an invention nonelected with traverse in the reply filed on October 15, 2008. The restriction requirement was made FINAL in the Official Action dated January 22, 2008 (see particularly pages 2-3). For at least this reason, claim 10 will not be further treated on the merits at this time.
2. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-7, 9 and 11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hoetzi (US 6,505,483 B1) as evidenced by Hoetzi (US 5,320,329).

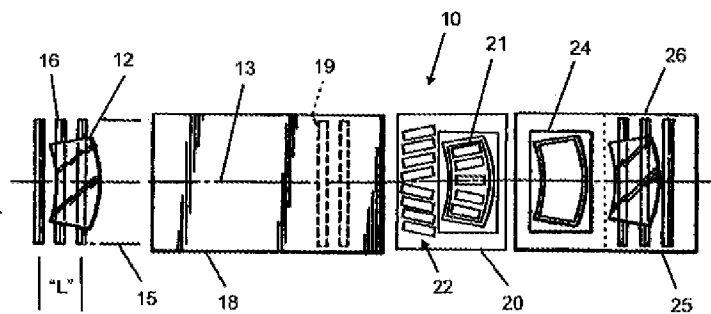
Applicant is advised that the following grounds of rejection are equivalent to that issued in the Official Action dated January 22, 2008. Any distinctions between the prior issued Official Action and the following have been incorporated solely to clarify the basis for the rejection.

With particular reference to the instant figure 1, Hoetzi '483 teaches a method for transferring a heat softened glass sheet from a rotating roller bed (19) in an oven (18) to a bending ring mold (80 – see fig 8) in a press station (21). The transfer is conducted at a "a horizontal height level" or "without vertical oscillations" (Column 4, lines 33-35) from a position in the oven where the glass is supported by the rollers to a position in the region of the furnace exit wherein the roller support is terminated and the sheet is thereafter supported from below by an air flow onto the bottom surface of the sheet (Column 13, lines 24-52).

Regarding the transfer process, the '483 reference teaches that "when the glass sheet reaches the furnace exit, a glass run out section of the roll drive goes to high speed and this causes the glass to transfer to dumper pad(s) (82)" (Column 13, lines 25-28). The Examiner construes the latter excerpt as an indication that there exists at

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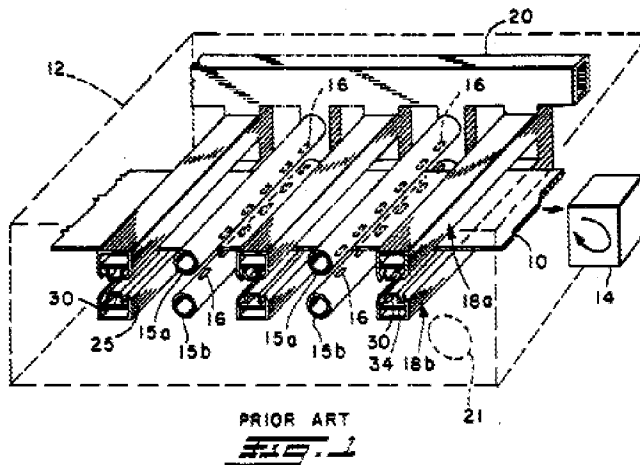
least a nominal transfer force between the last one of said rotating rollers (19) and the glass sheet during the transfer of said sheet from the roller bed to the bending ring.

**FIG. 1**

In the '483 embodiment, the glass sheet is supported by and guided downstream on an air cushion formed by directing an air flow onto a bottom surface of the glass sheet. Once the glass sheet arrives at the location of a bending ring, conveyance of the glass sheet is stopped by a "conventional guide/stop drive arrangement". The suspended glass sheet is subsequently lowered into contact with the ring mold by "lowering the pressure pads" (Column 13, lines 53-67) and/or by reducing the air flow.

Directing air jets onto both top and bottom surfaces of glass sheet at last one of the rotating rollers is explicitly contemplated in '483 patent:

The '483 reference teaches a preferred embodiment employing a lower pressure pad configuration wherein the pressure pads are directed only against the bottom surface of the glass sheet. The reference clearly indicates that "the pressure pad configuration illustrated in FIG. 3 is well known, but that it is to be understood that this invention is not limited to any specific pressure pad configuration" (column 7, lines 24-26). The reference continues by indicating that several of the pad configurations shown in the '329 patent may be used in the present invention. To this end, the patent explicitly contemplates providing "a pressure pad beneath the strip and an opposing pressure pad above the strip such as shown in FIG. 1 of the '329 patent" (Column 7, line 24-33). The referenced upper and lower pressure pad arrangement of the '329 patent is provided in the following excerpt image.



Substitution of the lower pressure pad arrangement depicted '483 patent for a pressure pad arrangement comprising opposing upper and lower pressure pads (e.g. bottom air flow means and upper elevation stop) similar to that of the '329 patent is explicitly contemplated in the prior art. Such an upper pressure pad arrangement is

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understood to provide for claimed "elevation stop". In addition, the upper pressure pads are also understood to apply a force directed upon the top surface of the glass sheet.

Specifically, this applied upper force acts upon the top surface of the glass sheet effectively pressing down upon the sheet "at a location of a last one (of) said rotating rollers". Since this upper force acts in opposition to the force applied by the lower pressure pads, the '329 upper pressure pad arrangement is understood to inherently improve the contact force between the roller bed and the glass sheet when all other process variables are held constant. It follows that the '329 pressure pad arrangement would be expected to improve "the transfer force of the last one of said rotating rollers" when compared to arrangement of the '483 patent which comprises only lower pressure pads. Restated, when all other process variables are held constant, directing an air jet upon the upper surface of the glass sheet at a location of a last one of the rotating rollers, as provided in the '329 pressure pad arrangement, would inherently improve the transfer force of said roller compared to not applying the upper air jet.

Should Applicant contest the inherency of the improved transfer force, one of ordinary skill in the art would reasonably be expected to optimize the respective blowing pressure of the '329 upper and lower pressure pads as a routine matter of process optimization. That is, the prior art explicitly contemplates the '483 glass sheet transfer apparatus which employs upper pressure pads of the '329 patent to direct air jets onto the top surface of the glass sheet at a location of a last one of said rotating rollers. One of ordinary skill would be reasonably expected to balance or optimize the force of the upper and lower directed air jets in view of the glass sheet size, thickness, weight and

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other conventional process variables in order to optimize the sheet transfer process.

Absent compelling evidence to the contrary, Applicants claimed improvement in "the transfer force of the last one of said rotating rollers would reasonably have been achieved through routine experimentation over the prior art disclosed process.

Response to Arguments

3. Applicant's arguments filed July 21, 2008 have been fully considered but they are not persuasive. Specifically, Applicant argues that the Hoetzi'483 patent nowhere addresses the claimed feature wherein "air jets are directed onto the top surface of the glass sheet so that the glass sheet is pressed down substantially at a location of a last one of the transferring rotating rollers".

4. The Examiner disagrees.

5. Applicant was explicitly advised of the substitution of the lower pressure pad arrangement of the '483 apparatus with the upper and lower pressure pad arrangements from the '329 patent in the Official Action dated January 22, 2008 (see page 5-6). As explained more fully in the rejection of claims above, such an upper pressure pad arrangement is understood to press down upon the top surface of the glass sheet "substantially at a location of a last one of the transferring rotating rollers". Such a pressure pad arrangement is understood to broadly "improve" the transfer force of the rotating rollers compared to directing air jets only against the bottom of the glass sheet when all other process variables are held equal.

Conclusion

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6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON L. LAZORCIK whose telephone number is (571)272-2217. The examiner can normally be reached on Monday through Friday 8:30 am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven P. Griffin/
Supervisory Patent Examiner, Art
Unit 1791

JLL